respond to treatment in the initial 12 weem model cycle. Patients could relapse or continue to respond wto treatment in subsequent cycles. Based on pooled efficacy data the initial reponse probability for IVIG used in the model was 0.47(95% C.I. 0.36, 0.58). Based on a published study, the 12 week proability of relaspe used in the model was 0.06 (95% C.I. 0.02,0.14). Non-responding IVIG patients were assumed to be switched to corticosteroids. Patients on corticosteroids were at risk of a number of adverse events (fracture, diabetes, glaucoma, cataract, serious infection) each cycle. **RESULTS:** Over the 5 year time horizon the model estimated the incrmetnal costs and QALYs of IVIG treatment compared to corticosteroid treatment to be $105,356 and 0.188 repsectively. The incremental cost per QALY of IVIG was estaimated to be $551,031. The cost per QALY of IVIG was very sensitive to the assumption on frequency and dosing of maintenance IVIG treatment. **CONCLUSIONS:** Based on common willingness to pay thresholds, IVIG might not be perceived as a cost effective treatment for CIDP.

PSY31

COST-MINIMIZATION ANALYSIS COMPARING 5% AND 10% INTRAVENOUS IMMUNOGLOBULIN PREPARATIONS IN THE TREATMENT OF PRIMARY IMMUNE DEFICIENCY

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OBJECTIVES: Conduct an economic evaluation comparing treatment costs between 5% and 10% Intravenous Immunoglobulin (IVIG) preparations. **METHODS:** A cost-minimization analysis (CMA) was performed to compare treatment costs between five 5% (including one lyophilized product) and one 10% IVIG preparations, as there are no differences in outcomes achieved between different IVIG preparations. The CMA was done using a societal perspective and cost included both health care costs as well as caregiver costs. More specifically, the following costs were considered in the model: drug costs, facility costs, pharmacy and nursing costs and productivity costs. Other data included in the model were obtained from the products' prescribing information. One adult patient (65 kg) and one pediatric patient (25 kg) receiving a dose of 0.4 g/kg were modeled. **RESULTS:** Even though equal cost per gram was assumed across all the IVIG products considered in the model, total drug cost was higher for one of the 5% product because of the limited choice in vial sizes for this particular product. Only the lyophilized product incurred pharmacy costs for reconstitution ($15.0). Infusion time was shortened by 51 minutes with the 10% product (2.0 h compared to the 5% products (2.9 h), saving approximately $21.4 per infusion. For the adult patient, nursing costs were higher for the 5% products as more vials were required during the infusion (4 to 5 vials for 5% vs. 3 for 10%). On average, the use of a 10% preparation saved $65.2 per dose for the adult patient and $32.7 per dose for the pediatric patient. Assuming a dosing frequency of 3 weeks, yearly savings could range between $522.2 and $3.072.2 in adults and $486.8 and $831.6 in children. **CONCLUSIONS:** The availability of a 10% IVIG preparation could generate substantial savings compared to 5% preparations.

PSY32

THALIDOMIDE PLUS MELPHALAN AND PREDNISONE FOR AUSTRALIAN PATIENTS NEWLY DIAGNOSED WITH MULTIPLE MYELOMA IS COST-EFFECTIVE WHEN COMPARED WITH MELPHALAN AND PREDNISONE ALONE

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OBJECTIVES: Thalidomide is an immonumodulatory drug that has been shown in a phase III clinical trial to be effective when used in combination with melphalan and prednisone (MPT) in patients newly diagnosed with multiple myeloma who are unable to undergo stem cell transplant (SCT) or high-dose chemotherapy (HDC). As part of an application to the Pharmaceutical Benefits Advisory Committee (PBAC) in Australia we assessed whether such use is cost-effective when compared with MP alone, the current standard of care. **METHODS:** Data on the comparative efficacy of MPT versus MP alone were sourced from a completed international phase III study. The results from that study showed a statistically significant difference in median survival of 1.53 years (p = 0.0006) in favour of MPT. We applied a digitising program to the published Kaplan-Meier survival curves in order to estimate the mean survival (area under the curve) and extrapolate the results to a lifetime horizon. These data were incorporated into a cost-effectiveness analysis taking the perspective of the Australian health care system. Outcomes were assessed as quality adjusted life years gained (QALYG), based on applying published utility values to the extrapolated survival data. The costs of the primary drug therapies (MPT or MP), associated medical services, and the treatment of thalidomide related adverse events were all included. Costs and benefits were discounted at 5% per annum, and costs were stated in A$ at 2008 prices. **RESULTS:** The modelled analysis estimated an incremental gain in average survival of 1.47 years. This translated into 1.14 QALYGs once the utility values were applied. The associated average incremental cost was AUS$23,953. The resulting cost per QALYG was A$20,998. **CONCLUSIONS:** This analysis resulted in a positive recommendation from the PBAC to fund thalidomide for the treatment of patients newly diagnosed with multiple myeloma.

PSY33

A COST-UTILITY ANALYSIS OF IDET COMPARED WITH SPINAL FUSION

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OBJECTIVES: This study assesses the cost-effectiveness of Intradiscal electrothermal therapy (IDET) relative to femoral ring allografts (FRA), a form of spinal fusion, for discogenic back pain. Spinal fusion is an established surgical treatment; IDET is less invasive and potentially less costly. McKenna (2005) reported an RCT comparing FRA and titanium cage (TC). Based on this trial, Freeman (2007) demonstrated the relative cost-effectiveness of FRA. The present study used the same FRA cohort for evaluating the cost-effectiveness of IDET vs. FRA. **METHODS:** Patient-level data on resource use up to 24 months and SF-36 (measured pre-operatively and at 6, 12, 24 months) were available for all 37 FRA patients of McKenna (2005) trial. Comparable data were collected prospectively on 85 patients treated with IDET at Queen's Medical Centre, Nottingham. Data variables were matched between the two patient groups. Utility scores were produced from SF-36 by using Brazier (2004) algorithm. Differential costs and utilities, together with 95% confidence intervals, were estimated using bias corrected and accelerated bootstrapping. **RESULTS:** There were no significant differences between the groups in age, gender or SF-36 domain scores, except physical function (p = 0.004) and mental health (p = 0.021), both lower in the FRA group. Baseline utility scores were lower in the FRA group (0.48 vs. 0.52, p = 0.03).On the central assumptions, the expected cost per patient was lower with IDET by £3713 (95% CI -£2684 to -£4742). The differential QALYs of IDET vs. FRA (adjusted for preoperative utilities) were 0.03 (95% CI -0.07 to 0.12). At a willingness-to-pay (WTP) threshold of £20,000 per QALY, the net health benefit (NHB) of IDET was 0.21 and the probability of IDET being cost-effective was 1. If the WTP threshold was £30 K/QALY, the NHB was 0.15 (probability cost-effective = 0.997). **CONCLUSIONS:** IDET offers a cost-effective alternative to spinal fusion. IDET has the advantage that it is less invasive and can be performed as a day-case procedure.

PSY34

COST-UTILITY OF BARIATRIC SURGERY IN THE TREATMENT FOR MORBID OBESITY IN FINLAND

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OBJECTIVES: . To evaluate the cost-utility of bariatric surgery (gastric bypass, sleeve gastrectomy and gastric banding) versus ordinary treatment in health care. **METHODS:** Analysis was done from health care providers' perspective using a Markov cycle tree and a time horizon of ten years. Events during the first year, including mortality and primary complications resulting in reoperation, were modelled in a decision tree. Then the patient cohort moves into a state transition model including four states: *alive* (no reoperation or abdominoplasty), *reoperation*, *abdominoplasty*, and *death*. The parameter values were taken from a large representative population survey measuring health-related quality of life (HRQoL) and health service use, as well as from registers and literature. When necessary, expert opinions were used. Different types of sensitivity analysis were conducted. **RESULTS:** . In CUA bariatric surgery dominated strongly the ordinary treatment. The mean cost was €31,800 and €44,800 and the mean number of QALYs 7.05 and 6.51 for bariatric surgery and ordinary treatment, respectively. Uncertainty around the parameter values was tested comprehensively in sensitivity analyses and the results were robust. **CONCLUSIONS:** The model takes into account all the major events. Strengths of the model include the actual cost data on bariatric surgery and inclusion of abdominoplasty, which seems to be neglected in previous analyses. Also, a unique set of data on mean health care costs and HRQoL for both alternatives was available. The time horizon is rather short and may underestimate the effectiveness of bariatric surgery, but it is based on available follow-up data.

PSY35

PROCESS MEASUREMENT IN IV-PCA AT UPPSALA UNIVERSITY HOSPITAL SWEDEN

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OBJECTIVES: To describe and measure intravenous patient controlled analgesia (IV-PCA) processes in postoperative pain management in patients in clinical practice that has undergone surgery at the Uppsala University Hospital, Sweden. **METHODS:** A model was designed and visualized via swimlane notation. Sub process levels were defined as "education", "purchasing/depreciation/maintenance", "procurement", "supply", "application" and "disposal". Based on these, data was collected by two research methods, interviews and measurement forms including patient and staff satisfaction questionnaires. **RESULTS:** Ten members of hospital personnel with different responsibilities were interviewed to define the roles and activities involved in the entire IV-PCA process. Ten different roles were defined with 149 different activities. The involved roles and the duration of each activity in the sub process levels "supply", "application" and "disposal" were measured from 85 consecutive patients with 13 different surgery types. The average duration of IV-PCA use per patient was